

Approved by Natural Resources Board:

Date

PROPERTY TASK FORCE

Leader - Steven H. Lewis, Bureau of Parks & Recreation

David Cline, Park Superintendent Lew Meyers, Wildlife Management Roger Kerr, Fish Management

Craig Hollingsworth, Forestry

Submitted:

Yellowstone Lake State Park Table of Contents Section I -- Actions

A. Goal and Objectives

- 1. Goal
- Objectives
- Additional Benefits

B. Recommended Management and Development Program

- 1. Property Development Proposal
- 2. Land Acquisition, Development, and Major Management
- 3. General Timetable
- 4. General Costs
 - -- development
 - -- operations and maintenance
- Other considerations

C. Maps and Graphics

Figure 1 Regional Locator

Figure 2 County Map

Figure 3 Ownership Map

Figure 4 Development Map (existing and proposed) And Land Use

Section II -- Support Data

A. Background Information

- 1. Location and Regional Context
- 2. History of Project Creation
- 3. Current Management Activities and Uses
- 4. Ownership and Tax Status
- 5. Other

B. Resource Capabilities and Inventory

- 1. Soils
- 2. Geography
- Geology
- 4. Hydrology
- 5. Fish
- 6. Wildlife
- Vegetative Cover
- 8. Water Resources
- 9. Historical and Archaeological Features
- 10. Land Use Potential

- C. Management Problems
- D. Recreation Needs and Justifications
- E. Analysis of Alternatives

Section III -- Appendix

A. Council Comments and Department Responses

Yellowstone Lake State Park Master Plan (Conceptual Element)

Section I -- Actions

A. Goal and Objectives

1. <u>Goal</u>: To provide a state park which will serve the recreational, educational, and nature experience needs of the park visitor while preserving and protecting the resource for future generations.

2. Objectives:

- a. To provide facilities to accommodate approximately 435,000 annual visitations for activities which include swimming, boating, picnicking, camping, fishing, hiking, cross-country skiing, snowmobiling, ice skating, nature study, and other recreational pursuits.
- b. To manage and enhance the property's scenic and natural qualities by maintaining and restoring the existing landscape.
- c. To maintain the park's vegetative resources in accordance with the Department's Manual Code 2532 as it refers to tree cutting. This manual code limits tree cutting activities to safety, salvage, aesthetics, and forest perpetuation. Tree and floral food producing shrub planting programs will be continued for the benefit of birds and other wildlife.

3. Additional Benefits

a. The park is adjacent to the Yellowstone Lake Wildlife Area and because of this close physical relationship the potential for extensive recreational use such as hiking, nature study, and photography exists in the wildlife area.

B. Recommended Management and Development Program

1. Property Development Proposal

It is proposed to manage and develop this recreational park as a facility that will accommodate approximately 435,000 annual visitations. Proposed facility development includes the following:

-- A new picnic/day-use area consisting of a 4-unit pit toilet, well, 30 picnic tables, a small picnic shelter, children's play equipment, and parking for approximately 40 cars.

- -- Development of an additional 50 family-unit campsites to be located in the area of the existing group camp, and the establishment of a new group camp on new lands to be acquired in the northeastern area of the park (will include water and toilet facilities as needed).
- -- A new beach house with toilet facilities and changing stalls.
- -- Removal of the existing concession building and construction of a new structure on the existing site.
- -- Construction of a new park headquarters building to replace the house trailer currently serving temporarily as the park headquarters. The new building will be built on the same site occupied by the house trailer.
- -- A new public contact/sticker sales booth will be constructed at the west end of the park.
- -- Construction of a new boathouse and pier to replace delapidated structure now in service (houses the existing patrol/rescue boat).
- -- Construction of a 2000 sq. ft. heated addition to the existing metal shop/storage building. This project will include the development of toilet, water, and lunchroom facilities which currently are not in existence.
- Refurbishment and renewal of existing boat launch and boat storage facilities

2. Land Acquisition, Development, and Major Management

a. Land Acquisition

The new ownership goal for Yellowstone Lake is 952 acres, which is 192 acres more than the old ownership goal of 760 acres. Therefore, under this plan acreage to be <u>purchased</u> will be about 507 acres compared to the old acreage to be <u>purchased</u> goal of about 373 acres

Under this plan, the park boundry will change to reflect a 192 acre increase over existing ownership goals. Of this 192 acres increase, 120 acres will need to be purchased from private ownership and 72 acres will need to be obtained from existing DNR Wildlife Management lands.

These additional lands will be utilized for a new picnic/day-use area, for the development of a new 200 person group camp, additional hiking and snowmobile trails and for buffer zone which is necessary in order to insure the park-lake atmosphere against visual and sound intrusion.

The 72 acres to be transferred from existing DNR Wildlife Management lands were originally purchased in part with Pittman-Robertson and Dingell-Johnson funds. Therefore, the Bureau of parks and Recreaton will have to replace these lands with lands of equal size, type, and value. Ideally, this land will be located in the same geographic area as the lands taken from Wildlife Management, but could be acquired anywhere in the State.

The proposed boundary changes are outlined in Figure 3.

b. Development and Major Management

Development at Yellowstone Lake State Park will include a new picnic/day-use area consisting of a 4-unit pit-type toilet building, a small shelter building, 30 picnic tables, children's play equipment, and parking for 40 cars, a new 50-unit family campground, a change in location for the existing group camp, a new beach house housing toilet facilities and changing stalls, removal of the existing concession buildings, and construction of a new concession on the same site (we will work with the concessionaire to obtain this objective), a new park headquarters building (to replace existing trailer house), a new sticker booth/public contact booth to be located at the west end of the park, a new boathouse and pier (to replace existing worn structures), and a new 2000 sq. ft. heated shop/storage facility. New toilets and water are to be added to the existing stop/storage building.

Road work at the park will be minimal and will include a short access link to the new picnic area parking lot, a new campground road for the relocated group camp, new family campground camping spurs/pads, new asphalt parking/ramp area at the new cold storage building, and some possible parking lot resurfacing at the concession building site, and a short loop around the new park sticker sales/public contact booth to be built at the west end of the park.

Trails within the park extend for about four miles and are multi-use as they serve the hiker in summer and the snowmobiler in winter. Additional trails will be developed upon acquisition of land within the park boundary. These trails will include the implementation of a self-guided nature trail.

Camping within the park consists of a 129-unit family campground and a 200-person group camp. Proposed campground development consists of a 50-unit family campground expansion and the relocation of the existing 200-person group camp to a more favorable site.

The existing boat launch and boat mooring areas are to be refurbished and renewed to improve the existing physical facilities and to implement design changes which will more adequately limit the number of boats which will have lake access at any given time. The number boat morrings and car/boat trailer parking stalls will be approximately 114. This number includes the fleet operated by the boat rental concessionaire.

The Wisconsin State Comprehensive Outdoor Recreation Plan indicates a need for additional camping opportunities in the Lafayette County region. For more information, see Section D, Recreation Needs and Supply.

3. General Timetable for Acquisition and Development

Land acquisition within the new boundary is about 46% complete at this time. Future land acquisition within the new boundary will be predicated upon the willing seller/willing buyer premise and land valuations at the time of negotiations.

Development should occur as funding permits. All of the proposed projects in this plan are needed at this time to improve management activities, to replace worn elements within the park, or to meet the recreational responsibilities of the facility.

4. General Costs (estimates in 1981 dollars)

a. Development

Phase 1

	Picnic area Sticker sales/public contact booth Refurbish and renew boat launch areas	\$64,000 2,500 3,000
Phas	e II	
	Heated shop/storage building with toilet and water facilities	60,000
Phas	e III	
	Beach house with changing stalls and toilet facilities	170,000
	Development of 50-unit family campground and relocation and development of the 200-person group camp	200,000
 	Reconstruction of concession building Park headquarters building Boathouse, pier, and lift	50,000 105,000 10,000

Total Estimate

\$664,500

b. Operations and Maintenance

Yellowstone Lake State Park is headquarters for the Yellowstone Lake Work Unit which also includes the Yellowstone Lake Wildlife Area, First Capitol, Nelson Dewey, and Belmont Mounds State Parks, and the Pecatonica Trail.

Operations in the park consist of:

1) Providing recreational opportunities on a year-round basis

2) Providing services to campers and day-use visitors

3) Providing law enforcement for the park and wildlife area

4) Maintaining the site and facilities on site

- 5) Providing maintenance related to other work unit properties
- 6) Sales of park stickers, hunting and fishing licenses, and registration of campers

Personnel assigned to the park include the park manager, assistant manager, a clerk, a park ranger, and numerous LTE employees.

Annual Cost Approximation -- 1980 Figures

Permanent employees 4 people Seasonal employee 1 person Limited Term Employees (LTE) 15 people	\$61,660 9,079 19,576
Personnel (subtotal)	90,315
2000 Lines (contractual services) 3000 Lines (supplies)	15,117 2,000
Subtotal	17,117
Total (1980 Dollars)	\$107,432

Cost figures are not included for supervision and administration by the superintendent as he is involved in management at several properties.

Should the increase in family camping opportunities occur, it is estimated that no additional full time or seasonal personnel will be needed. If any personnel are needed because of this increase, it would be in the form of a summer LTE position.

The property is currently in need of two additional individuals capable of obtaining law enforcement credentials. A full-time individual would be involved in law enforcement duties and also would also be involved with game and maintenance activities in the Yellowstone Wildlife Area. It is anticipated that this individual would most probably divide his/her time evenly between the park and the wildlife area.

The second law enforcement position should be a 9-month seasonal position and would help off-set the loss of services provided by a park employe who recently gave up his law enforcement credentials.

5. Other Considerations

The park currently has granted easements to two property owners through park land to allow these individuals access to their homes and buildings from Lake Road. No change in these easements is anticipated.

A complete biological survey of the park property should be conducted as budgets permit. All areas of development will be examined for the presence or absence of endangered species and appropriate protective measures will be taken where appropriate. If any sites are discovered during construction, these activities will be suspended until the District Endangered Species Coordinator is consulted. Such sites will then be evaluated and appropriate protective measures will be taken if necessary.

A small prairie area (about 5 acres) exists along a high south facing slope, south of the town road which bisects the park, and just west of the existing concession building. This small prairie will be designated as a public use natural area and will be maintained accordingly.

C. Maps and Graphics

Location Maps

Figure 1 Region

Figure 2 County

Figure 3 Ownership

Figure 4 Development (existing and proposed) and Land Use Designation

K. Klepinger - July 27, 1981

Department Response:

The final draft of the master plan will address boating use on Yellowstone Lake. Through design of the boat trailer parking areas, limiting space at the permanent and temporary mooring areas and limiting the number of rental boats, boating use will be restricted to about 114 boats at any given time, based upon Department lake use standards. Depending upon past experience at Yellowstone Lake, it is expected that only 50 to 60 percent of the 114 boat limit will be using the lake resource at any given time.

3. Third Paragraph

The master plan contains numerous references to overuse of the lake, crowding, and conflicts between users. Yet, further development is planned, which will likely lead to even more conflict. There is a strong potential for gradual deterioration of the resource under the development proposed. We would favor an alternative which recognized the physical limitations of this small site.

Department Response:

Please note our response to the second paragraph.

4. Fourth Paragraph

Lafayette County suffers from a lack of surface water, wetlands and natural areas; thus Yellowstone Lake has high importance for recreational use. However, its natural features deserve a more cautious, conservative approach to development.

Department Response:

We agree that surface water, wetlands, and natural areas are precious resources in Lafayette County. Hopefully, by limiting boating pressure, we will in part enact a more cautious, conservative approach to the utilization of Yellowstone Lake. The additional picnic area will in fact reduce picnicking pressure on the resource by spreading this use over more area. Additional family camping will be constructed on an area presently used for group camping. The group camping area will be relocated on a site which is presently cultivated and grazed.

Thank you for the Council's thorough review and helpful comments on Yellowstone Lake Master Plan. Enc.

⁻ce J. L. Treichel - P&R/4

D. Morrissette - Nevin

D. J. Kulhanek - P&R/4

CORRESPONDENCE/MEMORANDUM -

Date: July 27, 1981

File Ref: 2510

To: K. Klepinger - RES/4

From: D. L. Weizenicker

Subject: SAPC Comments on Yellowstone Lake State Park Master Plan

Our Bureau's response to the Scientific Areas Preservation Council comments and recommendations on the Yellowstone Lake State Park Master Plan are as follows:

1. First Paragraph

We have reviewed the Yellowstone Lake State Park Concept Master Plan and find no direct conflicts with our program objectives. However, the Lafayette County Natural Area Inventory completed in 1973 located 5 sites of some natural area significance within the Yellowstone Lake Park and Wildlife Area. We are enclosing a copy of this inventory for your consideration. Two of the sites; Area 2, Yellowstone Prairie II; and Area 31, Yellowstone Oaks, are located within the wildlife area and are not affected by the park plan. Area No. 1, Yellowstone Prairie I in NW 1/4, SE 1/4 of Section 1, T3N, R4E, though quite small, should be protected and managed to keep it open. Classification as a public use natural area may be warranted.

Department Response:

We concur with the Council's recommendation that Yellowstone Prairie I be protected and managed. Its land use classification will be public use natural area, as suggested. Mention of management and maintenance of the prairie is included under the Recommended Management and Development Program section on page **5**.

2. Second Paragraph

Other natural areas located were Upper Yellowstone Marsh and Lower Yellowstone Marsh within Yellowstone Lake. Protection for the wildlife and fishery values of these areas is desirable. However, the very heavy recreational boating use of Yellowstone Lake could be detrimental to their preservation.



The State of Misconsin

SCIENTIFIC AREAS PRESERVATION COUNCIL

Box 7921 Madison, Wisconsin 53707

July 3, 1981

			2510	
IN	REPLY	REFER	TO:	

Mr. David Weizenicker Bureau of Parks & Recreation Dept. of Natural Resources P.O. Box 7921 Madison, WI 53707

Dear Dave:

We have reviewed the Yellowstone Lake State Park Concept Master Plan and find no direct conflicts with our program objectives. However, the Lafayette County Natural Area Inventory completed in 1973 located 5 sites of some natural area significance within the Yellowstone Lake Park and Wildlife Area. We are enclosing a copy of this inventory for your consideration. Two of the sites; Area 2. Yellowstone Prairie II; and Area 31, Yellowstone Oaks, are located within the wildlife area and are not affected by the park plan. Area No. 1. Yellowstone Prairie I in NW 1/4, SE 1/4 of Section 1, T3N R4E, though quite small should be protected and managed to keep it open. Classification as a public use natural area may be warranted.

Other natural areas located were Upper Yellowstone Marsh and Lower Yellowstone Marsh within Yellowstone Lake. Protection for the wildlife and fishery values of these areas is desirable. However, the very heavy recreational boating use of Yellowstone Lake could be detrimental to their preservation.

The master plan contains numerous references to overuse of the lake, crowding, and conflicts between users. Yet, further development is planned which will likely lead to even more conflict. There is a strong notential for gradual deterioration of the resource under the development proposed. We would favor an alternative which recognized the physical limitations of this small site.

Lafayette County suffers from a lack of surface water, wetlands and natural areas, thus Yellowstone Lake has high importance for recreational use. However, its natural features deserve a more cautious, conservative approach to development.

Sincerely.

Chairman

- a. Page 17 Wildlife. On the whole, a very fine assessment of wildlife. It is the opinion of the WRAC that of the projected 435,000 annual visitors a sizable number will be interested in all forms of wildlife that live in the area. The Council recommends that inventories of songbirds, reptiles, amphibians, and even some of the showy insects should be developed and be provided to those who show interest. These lists need not be exhaustive and could be developed locally.
- b. <u>Page 18 Vegetative Cover</u>. WRAC recommends a sample listing of common plants in the area particularly the flowering types. Again for the reasons given in the previous paragraph.
- c. Page 25, alternative 3. The WRAC considers the alternative 3, recommended by the task force, as the most viable and suitable for the project area. The Council urges that the Natural Resources Board approve it. If the resistance by private land owners does not soften, the Council suggests that parts of alternative 2 (page 24) be explored for compromise solution.

Department Response:

- a. & b. For interpretative purposes, lists of songbirds, reptiles, amphibians, insects, and common flowering plants would be very useful. Per your excellent suggestion, we will investigate the possibility of having these inventories developed locally if funds are not available to allow them to be conducted by Department personnel.
- c. We agree. Should a compromise be necessary we will consider the Council's suggestion of using parts of alternative 2 as a solution.

We appreciate the Council's complimentary support of the Yellowstone Lake Master Plan. Thank you for your comments.

cc: J. L. Treichel - P&R/4
D. J. Kulhanek - P&R/4
D. Morrissette - Nevin

CORRESPONDENCE/MEMORANDUM -

Date:

July 21, 1981

File Ref: 2510

To:

Richard Lindberg - PLN/6

From:

D. L. Weizenicker

Subject:

WRAC Comments on Yellowstone Lake State Park Master Plan

Our Bureau's response to the Wild Resources Advisory Council comments and recommendations on the Yellowstone Lake State Park Master Plan are as follows:

- Page 1 Goal and Objectives
- a. A very appropriate and excellent goal. WRAC compliments.
- b. The WRAC considers all of the objectives very appropriate and the Council wishes to extend special commendation to the task force for the provision in the last sentence of item c.
- c. Item 3, Additional Benefits, is an excellent proposal. We like it.

Department Response: (a, b, c)

The task force did a commendable job of drafting the property goal, objectives, and additional benefits for Yellowstone Lake. Thank you for the compliments.

2. Pages 1, 2, 3, 4, and 5 Recommended Management and Development Program

WRAC considers this section excellently presented. The big problems are resistance to land acquisition and the scarcity of state money for an appropriate budget. There certainly is no immediate relief in sight.

Department Response:

We agree.

3. Section II beginning on page 10 and concluding on page 25

WRAC considers this segment excellently prepared. Our compliments. There are three comments.

- b. <u>Page 18 Vegetative Cover</u>. WRAC recommends a sample listing of common plants in the area particularly the flowering types. Again for the reasons given in the previous paragraph.
- c. <u>Page 25</u>, alternative 3. The WRAC considers the alternative 3, recommended by the Task Force, as the most viable and suitable for the project area. The Council urges that the NRB approves it. If the resistance by private land owners does not soften the Council suggests that parts of alternative 2 (page 24) be explored for compromise solution.

Respectfully submitted,

Henry W. Kolka, Charperson Wild Resources Advisory Council General Review, Comments and Recommendations for the Yellowstone Lake State Park Master Plan Concept Element by the Wild Resources Advisory Council.

General Review

Wild Resources Advisory Council's congratulations to the property Task Force of Steven Lewis, David Cline, Lew Meyers, Roger Kerr and Craig Hollingsworth. The Yellowstone Lake State Park Master Plan Concept Element is somewhat of a masterpiece of putting together critical elements and trying to make them work without igniting an explosion. It is questionable whether the Department envisioned the overall popularity of the 455 acre impounded when it was built in 1954. In the opinion of WRAC the managers of this unit have performed a remarkable job of managing the valuable lake resource and its limited environs at a respectable quality level in the lake hungry southwestern Wisconsin. With acquisition of private lands to fill the projected goal and to activate the objectives at almost standstill and visitors' use pressure increasing, there is definite threat to the wild resources. The Council admires and commends the Task Force and managers in their determination to provide the needed services and at the same time protecting and enhancing the quality of the natural environment. We hope it can be done.

Comments and Recommendations

- Page 1 Goal and Objectives
- a. A very appropriate and excellent goal. WRAC compliments.
- b. The WRAC considers all of the objectives very appropriate and the Council wishes to extend special commendation to the Task Force for the proviso in the last sentence of item c.
- c. Item 3, Additional Benefits, is an excellent proposal. We like it.
- 2. Pages 1, 2, 3, 4 and 5 Recommended Management and Development Program

WRAC considers this section excellently presented. The big problems are resistance to land acquisition and the scarcity of state money for an appropriate budget. There certainly is no immediate relief in sight.

3. Section II beginning on page 10 and concluding on page 25

WRAC considers this segment excellently prepared. Our compliments. There are 2 comments.

a. <u>Page 17 Wildlife</u>. On the whole a very fine assessment of wildlife. It is the opinion of the WRAC that of the projected 435,000 annual visitors a sizable number will be interested in all forms of wildlife that live in the area. The Council recommends that inventories of songbirds, reptiles, amphibians and even some of the showy insects should be developed and be provided to those who show interest. These lists need not be exhaustive and could be developed locally.



UNIVERSITY OF WISCONSIN-EAU CLAIRE EAU CLAIRE, WISCONSIN 54701

DEPARTMENT OF GEOGRAPHY



July 1, 1981

Mr. David Weizenicker Bureau of Parks Box 7921, DNR Madison, WI 53707

Dear David Weizenicker:

The Wild Resources Advisory Council has carefully reviewed the Yellowstone Lake State Park Master Plan Concept Element and the Council members wish to congratulate the property Task Force of Steven Lewis, David Cline, Lew Meyers, Roger Kerr and Craig Hollingsworth for producing a quality document.

Henry W. Kolka, Chatrperson Wild Resources Advisory Council

уp

Alternative 3 Operate the park as a major destination recreational facility at current or slightly above present use levels. Continue to upgrade and to modernize the facility in order to improve current conditions and to meet the demands of future recreational needs while practicing a philosophy in character with the preservation of the resource and consistent with providing a quality recreational experience.

Analysis of Alternatives

- #1 The park could continue to operate as it has in the past. This course of action would not solve any of the existing management problems and would most likely lead to a deterioration of both the resource and the recreational experience provided by the property.
- #2 Operate the facility along with the Yellowstone Lake Wildlife Area by combining the two into a recreation area. This alternative would help solve the current management problems (all things considered) associated with the park, but at the same time would create new problems. Potential new management problems would involve multi-recreational use of the existing game lands, control of the hunt, control of parking in the game lands, and control of the existing large bore/small bore rifle-pistol range.
- #3 This alternative will meet current management and recreational needs to the greatest extent possible, considering the fact that the facility has numerous entrance points due to the town road which bisects the property. This alternative will allow for upgrading and preservation of the resource through development and land acquisition (as land becomes available for purchase) and will also allow for replacement of existing facilities as the need arises. This alternative will allow for an improved resource that will be able to adequately meet the recreational needs of today and the future.

Recommended Alternative

The management and development alternative that seems to be most appropriate for Yellowstone Lake State Park is Alternative #3.

Section III Appendix

Council comments and Department responses.

Picnic Tables

Year	1985	1995
Supply	4,311	4,311
Demand	5,883	6,300
Need	1.522	1,989

Camping (Developed) Private and Public Sites

Year	1985	1995
Supply	3,698	3,698
Demand	5,675	6,175
Need	1.977	2.477

Camping (Primitive) Private and Public Sites

Year	1985	1995
Supply	68	68
Demand	173	188
Need	105	120

Swimming (number of recreation occasions)

Year	1980	1995
Supply	50,332	50,332
Demand	35,700	40,700
Need		

E. Analysis of Alternatives

Yellowstone Lake State Park should be managed as a recreational park. Its primary function should be to maintain recreational opportunities for park visitors. Care should also be taken to protect the natural and aesthetic qualities of the site. Camping and day-use facilities should continue to be provided for the enjoyment, convenience, and safety of the park visitor. The park should continue to be operated at about current or slightly above present use levels.

Alternatives

Alternative 1 Do nothing, continue to operate the park on a status quo basis.

Alternative 2 Operate the facility in conjunction with wildlife management as a State Recreation Area as authorized by Wisconsin Statute 23.091.

Yellowstone Lake Dam Structure

A determination should be made in regard to the maintenance and operation of this structure. If this structure does not fall under "park business," and is a fish or wildlife responsibility, then parks should not be required to pay for maintenance and operations.

In essence, most of the management problems relate to the quality and safety of the recreational activity provided, and to the environment provided for employee safety and efficiency. Proposed development is not intended to increase the level of attendance to the facility, but rather to spread out the recreational facilities and to hopefully improve upon the existing recreational experience.

D. Recreation Needs and Supply

1. Southwestern Wisconsin

Planning region #3 of the State Comprehensive Outdoor Recreation Plan (SCORP) is comprised of the southwestern Wisconsin counties of Grant, Green, Iowa, Lafayette, Richland, and Sauk.

The 1974 population of the planning region was 174,214, or 3.8% of the State's population. The region is predominantly rural, with 70% of the population living in rural areas. Major cities include: Platteville (9,599), Monroe (8,654), Baraboo (7,931), Richland Center (5,068), and Reedsburg (4,585).

Region 3 is relatively rich in recreation resources. There are 14 state parks and nine county parks in the region. There are 26 public hunting and fishing areas in the region, mostly located along the Wisconsin River. The largest, the Blue River Wildlife Area with 1,700 hectares (4,200 acres), is located in Grant County. The Mississippi and Wisconsin Rivers, which are two outstanding resources, form the northern and western boundaries of the region.

Within the region, all recreational activities will note an increase in both demand and need during the years to come. With the exception of swimming, there exists a deficit in existing recreational supply which is not expected to be reversed through the 1990's.

SCORP projections indicate the following regional supply, demands, and needs for recreational activities in the region which includes Yellowstone Lake State Park:

Picnicking--Hectares (acres)

Year	1985	1995
Supply	341 (844)	341 (844)
Demand	1,167 (2,884)	1,260 (3,114)
Need .	826 (2,040)	919 (2,270)

Concession Building

Is an old structure which should be afforded extensive remodeling, or removal and replacement. In addition, the parking area adjacent to the structure and across the road from the structure should be resurfaced. The Department and the concessionaire should work together to rectify this problem.

Park Headquarters Building

This structure is a converted house trailer which has been added on to as park needs have required. The house trailer was originally brought into serve as a "temporary structure" and should be updated with a modern, energy efficient structure.

Boathouse

The existing park boathouse, which houses the patrol/rescue boat, is an old metal "on the water" floating structure. Built of salvaged materials several years ago, this structure most probably will not be worth fixing much longer and, in addition, cannot be considered to be of aesthetic value to the park.

Campground

The existing family campground is seldom filled on weekdays during the summer use season, but does fill every weekend (weather permitting). The weekend situation results in about 100+ turn-aways except for holiday weekends when the number of turn-aways escalates to about 350. Nearby private campgrounds also fill during these periods. Private campgrounds in the vicinity of Yellowstone Lake have about 90 campsites which are occupied on a seasonal basis. These campgrounds also have the capability to accept about 170 additional camping parties. Persons from these 260 or 80 campsites frequent the park as day-users (picnicking, swimming, boating, canoeing, fishing) and some also utilize the trailer sanitary dump system at the park.

Private Landowners Within the Park Boundary

Private inholdings within the park boundary present management problems due to the fact that these inholdings inhibit the development of "buffer zones" which are intended to separate park uses from private uses.

Yellowstone Lake Wildlife Area

Park staff are currently engaged (and historically have been) in maintenance activities and game management activities in the wildlife area. Some form of equatable payment for services rendered to the wildlife area by parks personnel should be investigated.

through the design of boat trailer parking areas, limiting space at the permanent and temporary mooring areas and through the limiting of rental boats. Depending on past experience at Yellowstone Lake, it is expected that only 50 to 60 percent of the 114 boat limit will be using the lake resource at any given time.

Two additional factors enter into the design-limit of boats at Yellowstone. The first is the boat which is "car-topped" to the boat landing. The second factor is the town raod which allows for parking on the road shoulder. The "car-topped" boat according to an experience at Yellowstone most likely will not present a problem due to the small number of boats being transported in this fashion and thusly no need for control is anticipated at this time. Parking along the shoulder of the town road does present a serious problem however, as the car trailer parking capacity along the town road is considerable. In order for the design-limiting of boats on Yellowstone Lake to be totally effective, "no parking" designation will have to be officially adopted by the Fayette Township Town Board.

Winter lake management problems include fishermen-snowmobiler conflicts, cars going through the ice, and the setting up and taking down of ice fishing shanties in a safe and timely manner.

Shop/Storage Building

The most immediate problem is the current lack of water or toilet facilities for the maintenance crews. In addition, the existing building is a combination cold storage/heated building, and the heated portion is too small (about 30' x 25') to allow for more than one maintenance activity to occur at any given time.

Town Road

The town road (Lake Road) which bisects the park presents numerous problems which directly relate to: safety, illegal access to the park (lack of sticker), and parking on the shoulder of the roadway. In addition, the road contributes to overall congestion, overcrowding, and vandalism due to the fact that it is not park controlled, and people can drive through at anytime day or night.

Beach Area

The existing toilets (picnickers use these too!) and changing stalls need to be increased in number in order to serve the 81,000+ annual visitors to the beach area. Also, some sand erosion is associated with the beach and additional sand needs to be trucked in each year.

The highest number of boats ever counted on Yellowstone Lake at one time was reported to be 275-300 boats. This includes boats on the lake and at in-lake moorings. This number of boats calculates to 1.65 to 1.5 acres of water surface per boat.

-- To provide a comparable reference relating the number of acres of water surface to a particular water activity, the following standard references have been developed through Department experience. Please bear in mind that the numbers indicate a sort of "average" between a minimum and maximum as it relates to the level of enjoyment that can be anticipated by a user of the resource.

Boating requires about 15 acres of surface water for each boat. Therefore, an "average" level of enjoyment can be anticipated by a boater if the total number of boats is around 30 on Yellowstone Lake. More boats decrease the enjoyment level, fewer boats will enhance the enjoyment level.

Fishing requires 4 acres of surface water for each fishing boat, thus Yellowstone Lake could provide for about 114 fishing boats at any given time and still provide for an "average" experience.

Waterskiing requires 20 acres of surface water for each waterskier and tow boat. Thus, Yellowstone Lake could provide for about 23 waterskiing experiences at any given time and still provide for an "average" experience level.

Please note that with each activity listed, it is assumed that no other boating activities are taking place. That is, there are <u>only</u> fishermen using the resource, or <u>only</u> boaters, or <u>only</u> waterskiiers using the resource, and that there is <u>no</u> mixing of activities.

Taking into account that there is land parking and water moorings for about 175 boats, even if only 50% of these boats were on the water at any given time, the surface area per boat would equal 5.2 acres. This is only slightly above what would provide for an "average" experience level for fishing (4.0 acres/boat), and is well below the 15 acres/boat for boating and the 20 acres/boat for waterskiing.

On busy summer weekends and holidays, Yellowstone Lake is over-utilized to the extent that the "average" level of enjoyment that can be anticipated by a user of the resource is unobtainable. That is, the quality of the recreational experience is less than it should be.

In an effort to reduce the boating pressure upon the waters of Yellowstone Lake, the Master Plan recommends that the total number of boats allowed on the lake at any one time be limited to about 114. To make this figure obtainable from a management standpoint, the design capacity of the park will be limited to about 114 boats

Limited access to the property would help significantly to rectify the problems associated with heavy use and overcrowding. It is difficult to control use when a public road is directly adjacent to park use araes. Some possible options include: Fence the entire property, obtain assistance from the township in regard to a no parking ordinance along the town road which bisects the property, or obtain ownership of the road from the township. Traffic counts (1979) indicate average daily counts through the park at 330 cars and counts on near-by CTH "F" at 430 cars per day.

Yellowstone Lake

-- Conflicts are numerous between fishermen and waterskiers, and between waterskiers and other waterskiers during the busy summer weekends and holidays. To help reduce conflicts, a "no motor" zone exists for about 45 acres of the 455-acre lake. In addition, waterskiing (and related) activities are limited by a time restriction, which prohibits waterskiing and related activities from 8:00 p.m. to 10:00 a.m. the following day. (NOTE: The "no motor" zone was originally established to protect fishery and waterfowl habitat).

Lake patrol activities are necessary to enforce these rules and regulations.

-- Direct lake-related problems primarily involve the boat launch areas which are extremely overcrowded on weekends and holidays.

Overcrowding of these facilities often approach the ridiculous as boat trailers are unhitched from cars to be parked on the grass adjoining the main boat launch, and the car is then parked in the day-use area parking lot. Even worse is the often seen blocking of car/trailer rigs by other car/trailer rigs when boat launch parking is full beyond capacity.

Car/trailer rig parking capacity for the entire park is 25, with an additional 50 trailers being accommodated in the main boat launch area where car/trailer rigs are required to unhook and park separately. This accounts for 75 boats in the water, which arrive at the lake via boat trailer. In addition, there are 40 tie-ups along the shore west of the main use area which provide mooring by the season, and 50 rental boats are available to lake users (165 boat total plus any car-topped boats).

-- Considering the number of trailer parking places, seasonal moorings, and boat rentals, the potential exists for about 175 boats to be on Yellowstone Lake from those sources alone. This calculates out to about 2.6 acres of surface water per boat. Not counted in these figures are boats which are temporarily moored by campers, and those boats brought in by car top. In addition, there are the "overflow" trailers which park along the town road (which traverses the park), and which also overfill the car/boat trailer parking areas.

9. Historical and Archaeological Features

There are no known historical or archaeological features that exist within the boundaries of Yellowstone Lake State Park. Prior to the scheduling of any major development, the State Historical Society will be notified in order to give them an opportunity to comment on any such sites should they exist.

Land Use Potential

Intensive Recreation Development Areas

The existing IRD (Intensive Recreation Development) at Yellowstone Lake consists of about 60% of the existing park ownership (224 acres) and includes the 129-unit family campground, 200-person group camp, picnic areas, swimming beach, day-use areas, boat launch facilities, and concessions. Also included is parking for 300 cars, toilet, and water facilities.

Extensive Recreation Areas

The existing Extensive Recreation Area (ERA) at Yellowstone Lake consists of about 39% of the existing park ownership (144 acres) and includes marsh, lowlands, rolling open fields, woodlots, and steep vegetated hillsides.

Administrative Areas

Existing administrative areas contain about 1% of the existing park ownership (4.0 acres) and include the shop/storage facility, the park headquarters, the boathouse, and the drain field/filter system for the shower building.

C. Management Problems

Heavy Use and Overcrowding

The public puts very heavy use pressure on the facility during weekends and holidays in the summer months. This heavy use results in overcrowding of picnic/day-use areas, lake access points, and on Yellowstone Lake itself. The main picnic area is extremely busy on weekends as the same area of the park also serves as a beach and a boat launch facility. Hopefully, some of the use pressure will be reduced through the implementation of the new picnic area which will separate this activity from the other uses. Overcrowding of parking lots and boat launch areas also occurs as does heavy vehicular traffic along the town road which bisects the park.

large rafts during the spring and fall migrations, as are other ducks common to Wisconsin. The lake also provides nesting for mallards, blue-winged teal, coot, and wood duck. The long-legged waders, green heron and great blue heron, have also found the flooded areas to their liking.

Other bird life encountered in the park and its environs are pheasant, ruffed grouse, spring warblers, and most probably examples of all southern Wisconsin birds are also to be seen in the area.

No endangered or threatened species of terrestrial animals are known to be present in the park.

7. Vegetative Cover

Cover Types and Site History

There are six vegetative cover types that have been identified within the park boundary.

Percentage of area and type:

- -- 40% hardwood forest; maple, oak, popular, and box elder are predominant. Other species include red and white oak, elm, basswood, shagbark hickory, and black walnut.
- -- 35% farmland in crops (oats, corn, hay)
- -- 10% lower grasslands (scattered oak and pine)
- -- 4% swampland
- -- 1% pine plantation

No known commercial logging operations have taken place within the park boundary.

Unusual Types of Vegetative Communities

White pine and white birch, two species rarely found in southern Wisconsin are present within the park boundary.

No endangered or threatened species of wild plants are known to be present in the park.

8. Water Resources

See Part 2 of this Section under Fish (page 18).

Yellowstone Lake is an invitation to anglers from all over Wisconsin and neighboring states. The increase in popularity was coupled with an increase in yield of fish; until in 1959, the lake had a record yield of over 52 lbs./acre to establish itself as one of the most productive lakes in southern Wisconsin. Increased yield coincided with an irruption of bluegills. Bluegill species are more easily harvested in greater numbers than largemouth bass which first inhabitated Yellowstone in abundance. Fishermen continue to be attracted in greater numbers and from greater distances as a direct result of such a history of production and harvest.

At the present time, Yellowstone is managed as a largemouth bass, bluegill, bullhead, northern pike, crappies, and perch fishery. There are also carp, walleyes, smallmouth bass, and muskellunge in the lake.

Due to the overpopulation of carp and other forage species and stunted panfish populations, the lake was drained once since its creation. This occurred in 1968. It is expected that the lake will have to undergo periodic chemical fish eradication and draining on a somewhat cyclical (as required) basis in order to insure the continuance of good quality sport and panfish fishing.

No endangered or threatened species of aquatic animals are known to be present in the waters of Yellowstone Lake.

-- Water Recreation and Uses

In addition to fishing (and ice fishing), Yellowstone Lake is also a popular lake for activities such as motorboating, waterskiing, canoeing, and sailing. Non-boating water related uses such as swimming, sunbathing, and visual enjoyment of the resource are also popular.

6. Wildlife

-- General Fauna Analysis

The park and its environs provide habitat for white-tailed deer, red fox, fox and gray squirrel, skunk, woodchuck, ground squirrel, raccoon, beaver, muskrat, mink, weasel, rabbit, shrews, mice, and moles.

The most productive wetland area in the county for wildlife is located around Yellowstone Lake. Besides muskrats and beaver there are many species of waterfowl, especially during spring and fall migrations. Waterfowl visitors include Canada geese and all ducks common to Wisconsin. Mallards and blue-winged teal are most common, with bluebills and ringnecks present in

habitat, has a maximum depth of eight feet, and a highly irregular bottom plain of barely submerged wooded knolls. The east end averages 12 feet in depth over a generally uniform basin. The original Yellowstone River channel conforms closely with the configuration of the south shoreline. The land area around the lake is completely state-owned at this time.

Besides the Yellowstone River which contributes an average of 16.0 cfs. to the lake's volume, there is Steiner Branch (1.0 cfs.) and two small spring-fed streams for an overall total of 17.4 cfs. which enters the lake. The U.S. Geological Survey gauging station, located on the river immediately above the lake, measured a sediment discharge of over three thousand tons annually (average 1955-58). According to the U.S. Geological Survey depth profiles on an established transect of the lake over a period of several years, the rate of extinction of the basin due to siltation over any one year was found to be negligible for the immediate future.

-- Description of Lake Shoreline

Due to the northwest-southeast orientation of the lake, it can be assumed that prevailing west southwest winds will establish well washed shorelines at the east end of the lake, while the protected west end will submit to encroaching marshlands and silt laden shallows. The present 6.6 mile shoreline contains several bays, timbered shoreline, marsh lands, and 2.2 miles of developed shoreline.

-- Influence on Development

Due to the rough topographic nature that exists within the environs of the park, and because of the town road which follows the shoreline of Yellowstone Lake through the entire park, future development will most probably be severely restricted. Hopefully, development pressure on the site will be relieved somewhat once the privately-owned lands within the park boundary are acquired by the Department.

5. Fish

On the basis of quantitative chemistry, this lake is classified as highly productive. Alkalinity readings rate it "very hard," and total phosphate determinations indicate "very good" fertility. All ions considered in the analysis were found to exist in proportions that are considered normal for a typical lake in southern Wisconsin. Dissolved oxygen profiles made in the early summer show adequate oxygen levels for fish life at all depths.

Unlike most other parts of the Driftless Area, Lafayette County does not have many outstanding outcroppings in the form of crags and pinnacles. However, it makes up for these attractions by being endowed with more tillable land area which provides for a richer agricultural base. This is especially true in the southern half of the county where much of the original land area was covered by native prairie and oak savanna.

Geology

The geological formations for Lafayette County are the same as those in southern Grant and Iowa Counties. The Platteville-Galena dolomite forms the main bedrock of the undulating uplands. The Upper Cambrian sandstone is nowhere exposed at the surface. Along the principal valleys, such as those of the Pecatonica and Fever Rivers, only the Platteville-Galena dolomite and the St. Peter sandstone usually occur and occasionally the Prairie du Chien formation. It is in this area, especially the Fever River Valley, where numerous lead and zinc deposits have been found which are characteristic of this type of formation. The lure of these metals had a direct bearing on the early development.

Presently, the greatest lead and zinc production in Wisconsin comes from two large mines located just south of Shullsburg in southwestern Lafayette County. Several other mines produce small amounts of ore, and many others could produce if the price of ore were more favorable. Mines make use of water for gravity settling of ore, these are always a potential source of silt.

4. Hydrology

Since Lafayette County is located in the Driftless Area of Wisconsin, there are no true lakes resulting from glacial action. There are only four named lakes and four unnamed oxbow lakes. Two of the named lakes are man-made impoundments one of which is Lake Joy. The two remaining named (one is Yellowstone Lake, and the other is a private fish hatchery called Beardsley Lake) and all unnamed lakes are oxbow lakes which were formed as a result of stream action and are very shallow.

Yellowstone Lake is an impoundment on the Yellowstone River in the northeastern corner of the county. It was one of the first impoundments constructed by the State of Wisconsin. The gates in the dam were closed in 1954. The dam structure was designed to raise the level of the Yellowstone River 23 feet behind nearly a quarter of a mile of dike to create an impoundment 1.9 miles long and 0.6 miles wide (Figure 4). This is a shallow, irregular body with generally steep shores except for the gradual slopes of its upstream end and the bay areas of the south shoreline. The west end contains an impoundment which has been used for fish rearing and water fowl

5. Other

Current land uses within the park include: picnic areas/day-use areas, beach, boat launch areas, boat docking facilities, shore fishing opportunities, a food and boat rental concession, auto and boat trailer parking areas, hiking trail, family and group campgrounds, a park headquarters, public contact station, shower and toilet facilities, a trailer sanitary dumping station, a shop storage maintenance area, and buffer zones incorporating tree as well as game food species.

B. Resource Capabilities and Inventory

1. Soils

-- Description of Types

The soils on the property are basically of residual origin with some alluvial soils found in the valley. The predominant soil type is silt loam, but a range of muck to sandy loams are also found. In the bottoms, the soils are fair to good in productivity but are subject to flooding. Subsurface drainage on a few soil types also presents a problem as there is a heavy clay pan underlying the valley floor at a depth of four to six feet.

The upland soils are generally silt loams which are moderately deep to deep, well to moderately well drained, with general high available moisture content, overlying limestone bedrock.

-- Influence on Development

Limitations caused by soil types fall into two general categories: mechanical and sanitary. Park facility design should carefully consider this when planning structures, roads, and sanitary facilities. Most serious difficulties would probably occur in areas of organic and poorly drained soils and in areas where a very thin mantle of soil over bedrock or hard pan exists.

2. Geography

Lafayette County is situated in that portion of Wisconsin called the Driftless Area, an area which lacks evidence of recent glacial action. According to Martin (1932), the county is located in the Southwestern Uplands, one of the five geographical provinces of Wisconsin. It consists of rugged, hilly country with many ridges and valleys. The elevation of this upland plateau ranges from 900 to 1,200 feet above sea level. The uplands stand 100 to 200 feet above the Eastern Ridges and lowlands to the southeast, and 200 to 350 feet above the Central Plain to the northeast. They resemble the rugged plateau of West Virginia or Kentucky.

Year	<u>Visitations</u>	Campers
1980	344,536	41,653
1979	398,795	44,203
1978	375,841	39,489
1977	396,381	39,358
1976	409,426	40,426
1975	300,036	40,323
1974	236,951	36,911

b. In the summer, recreational activities found to be the most popular within the park are associated with day-use activities such as fishing, boating (includes waterskiing, sailing, canoeing, etc.), picnicking, swimming, and hiking. In winter, ice fishing and snowmobiling are the dominant uses.

The primary reason for the popularity of Yellowstone Lake State Park is the impoundment known as Yellowstone Lake. This water feature is the largest contained body of water in southwestern Wisconsin and as a result draws many visitors from northern Illinois as well as southern Wisconsin.

4. Ownership

Current property ownership within the existing (old) boundary consists of 372.66 acres fee title and .37 acre in easement, which together total 373.03 acres. The current acreage goal is 760 acres, with 386.97 acres remaining to be acquired. Current ownership is 49.1% complete at this time.

Through Natural Resources Board approval of this plan, the total park acreage goal will increase by 192 acres and will total 952 acres. Of the 192 acre increase, 72 acres will be acquired from DNR Wildlife Management, and 120 acres of private lands will need to be purchased once they become available on a willing seller/willing buyer basis.

-- Tax Status

On lands presently owned by the Department, the Department pays aids in lieu of taxes. Historically, the first payment to the town treasurer after July 1st is based upon the May 1st local assessments following acquisition, multiplied by the local, county, and school tax rates levied for that year. Subsequent payments are made on a descending percentage scale (10%) each year, (based upon the first year's full payment) until the tenth year. Every year hereafter the rate of payment would be 10% of the first year, except that the amount would never be less than 50¢ per acre.

1970 In order to provide more efficient control and development of the property, the developed 352-acre recreational area was turned over to the Bureau of Parks and Recreation by NRB action in July 1970.

1970 - Present Minimal development and land acquisition have taken place during this period. Additional development includes the implementation of a trailer sanitary dumping station, the installation of bulletin boards in the campground, the installation of changing stalls at the beach, the installation of a lifeguard tower, asphalt surfacing of the main day-use area parking lot, construction of two new pit toilet buildings, and a new shower building.

3. Current Management Activities and Uses

a. Status of Site Development

Existing recreational site development on the state-owned lands of Yellowstone State Park consist of the following:

-- 9 acres picnic area

75 picnic tables 16 grills

-- 200 lineal feet of swimming beach

-- 300 parking stalls

-- 4 miles of snowmobile trail

same trail

-- 4 miles of hiking trail

shower building in camparound

-- 129 unit family campground

-- 200 person capacity group camp

3 boat landings

--

-- 5.5 miles of park roads

-- 1 trailer sanitation dumping station

-- I beach changing stall building

-- I park manager's office and contact station (trailer)

-- 1 contact station (small, somewhat portable) at east end of property

-- 1 concession building

-- 1 maintenance shop

Based on annual visitation records, Yellowstone Lake State Park ranks among the top ten state parks in both visitations and campers. From 1970 to 1974, the park had an average of 240,000 visitations per year. More recent figures indicate that use is up considerably from that average.

Upon acquiring the property, the Bureau of Parks and Recreation has operated the facility under Chapter 27 of the State Statutes and Administrative Code 45. Since the park and wildlife area share a common boundary, and completely surround the Yellowstone Lake impoundment, the Department has comprehensive law enforcement responsibilities on the lake as well as the park and wildlife areas.

Since the Bureau of Parks and Recreation assumed responsibility for this property in 1970, 21 additional acres have been acquired, bringing the State ownership within the park boundary to a total of 373 acres. The total acquisitional goal within the park boundary (existing, not proposed) is 859 acres.

- -- Chronological Historical Overview of Acquisition and Development
 - 1949-1959 Initial land acquisition by Division of Fish,
 Game, and Enforcement under Chapter 29 Wisconsin
 Statutes and Administrative Code 45 in
 conjunction with the Federal Pittman-Robertson
 and Dingell-Johnson Acts.
 - 1954 A 1,200-foot-long earthen dike and 100-foot concrete control structure on the Yellowstone River were completed and 455-acre Lake Yellowstone was created.
 - 1954-1963 Boat launch facilities and picnic area with fireplaces were built in a cleared area along a portion of the North Shore. People started camping in this area and it soon became so overcrowded that action had to be taken in order to relieve the situation. A permanent camping facility to be built away from the lake shore was decided upon.
 - The permanent campground was opened, and a camping fee was assessed to pay for the new facilities. Pit toilets, running water, and electricity were provided. In addition to the camping facility, the boat launch facilities, swimming beach, and hiking trails became so well known that visitations increased greatly.
 - 1968 The trend in visitations indicated that the property was becoming a major recreational facility in southwestern Wisconsin, and the name was changed from the Yellowstone Fish and Wildlife Area to the Yellowstone Recreational Area.

Section II -- Support Data

A. Background Information

1. Location and Regional Context

Yellowstone State Park is located in the northeast quadrant of Lafayette County in southwestern Wisconsin. The exact location is Lafayette County, T3-4H, R4-SE, Sections 1, 2, 35, 36, of Fayette Township and Section 6 of Argyle Township.

The park is locally accessible via Lafayette C.T.H. G and N, northwest eight miles from Argyle, C.T.H. F northeast nine miles from Darlington, and C.T.H. F seven miles from Blanchardville.

Regional access to the area is via U.S. 18-151, and State Highways 11, 81, 78, and 39. The average daily traffic counts (1974 data) are as follows:

Highway	Average Daily Traffic Count
U.S. 18-151	5340
Wis. 11	2180
Wis. 39	310
Wis. 78	600
Wis. 81	1550

Accessibility studies indicate that in 1970, 350,000 to 400,000 people could reach the Yellowstone State Park area in one hour by automobile. In 1990, the number of people who could reach Yellowstone by automobile in one hour is expected to reach 450,000.

2. History of Project Creation

a. Acquisition by the Department of Natural Resources

The initial acquisition area of 1,888 acres was acquired by the Division of Fish, Game, and Enforcement under Chapter 29 of the Wisconsin Statutes and Administrative Code 45. The lands were acquired between 1949 and 1959.

In July 1970, the Natural Resources Board's Land and Business Committee recommended to the Natural Resources Board that the 352-acre intensively developed recreational facility on the shoreline of Yellowstone Lake be turned over to the Bureau of Parks and Recreation for administration and control. The Board approved, and in August 1970 this area became known as Yellowstone Lake State Park.







